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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/771,293	02/05/2004	Kazuyo Ikeda	000862.023447.	4458
5514 7590 09/28/2007 FITZPATRICK CELLA HARPER & SCINTO 30 ROCKEFELLER PLAZA NEW YORK, NY 10112			EXAMINER PATEL, JAYESH A	
			ART UNIT 2624	PAPER NUMBER
			MAIL DATE 09/28/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/771,293	<b>Applicant(s)</b> IKEDA, KAZUYO	
	<b>Examiner</b> Jayesh A. Patel	<b>Art Unit</b> 2624	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 03 August 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-18, 20 and 22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18, 20 and 22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

1. The amendments to the claims dated 08/03/2007 have been entered.
2. Claims 19 and 21 have been cancelled from further prosecution.
3. The arguments presented on Page 13 Lines 20-23 and Page 14 Lines 7-10  
**“Niblack and Brown are not seen to disclose or suggest at least the feature that the reduced image of the candidate image (or that a reduced image of a determined candidate image is displayed in a plurality of patterns that includes an enlarged partial image)” are persuasive.**
4. In view of the above arguments the rejections have been presented.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-18,20,22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Niblack et al. (US 6182069) hereafter Niblack in view of Yang et al. (US 20020025084) hereafter Yang.

5. Regarding Claim 1, Niblack discloses an image search apparatus in **(FIG 1)** which searches for an image by using image storage means for storing a plurality

of images (**Element 36**), region information storage means for storing partial images included in the respective images stored in the image storage means in correspondence with the respective images (**Element 34**), and region feature storage means for storing features of the partial images stored in the region information storage means in correspondence with the partial images (**Element 35**), comprising: image feature designation means for designating a feature of a search target image (**Elements 15,16 and Col 3 Lines 58-65**); candidate image determination means for searching features of partial images in the region feature storage means on the basis of the feature of the image which is designated by said image feature designation means (**Element 32 and Col 3 Lines 66 through Col 4 Lines 1-17**), and determining an image which is made to correspond to a partial image obtained on the basis of a search result as a candidate image from the images stored in the image storage means at (**Col 4 Lines 11-17**). Niblack discloses a search result display means (**Element 13**) for displaying a reduced image of the candidate image determined by said candidate image determination means. Niblack is silent and however does not disclose wherein said search result display means displays a reduced image of the candidate image upon enlarging the partial image included in the candidate image.

Yang in (**Fig 1-3,Page 1 Para 5,Page 4 Para 47,48,53,54 and Page 5 Para 65**) disclose wherein said search result display means displays a reduced image of the candidate image upon enlarging the partial image included in the

candidate image. Yang discloses in Sections 1 and 2 of fig 2 where an I211 is enlarged to Img 2 **(as shown in the dotted line with circled 2)**. Yang further discloses that the enlargement method and apparatus has an advantage of speed and low operational cost in Para 18 by enlarging the reduced size image at the server. Both Niblack and Yang are analogous art and are from the same field of endeavor, therefore it would have been obvious for one of ordinary skill in the art at the time the invention was made to have used the teachings of yang in the apparatus of Niblack for the above reasons.

6. Regarding Claim 2, Niblack and Yang discloses the apparatus according to claim 1. Niblack further disclose characterized in that when a plurality of candidate images are obtained on the basis of a search result, said search result display means displays reduced images of the plurality of candidate images in the form of a list at **(Element 13, Fig 6 Col 8 Lines 29-42, fig 9 Col 10 Lines 17-25 and Col 18.Lines 24-28)**. Yang also discloses in **(Fig 2 sections 1 and 3)** the list of reduced images.

7. Regarding Claim 1, Niblack and Yang disclose the apparatus according Claim 1. Yang further disclose characterized in that wherein said search result display means displays a reduced image of the candidate image upon enlarging the plurality of partial images included in the candidate image in **(Fig 2-3)**.

8. Regarding Claim 4, Niblack and Yang disclose the apparatus according to Claim 1. Yang further disclose characterized in that said search result display means synthesizes the plurality of partial images to generate a new single partial image, and displays the new single partial image as a reduced image (**one resolution lower or thumbnail**) in Fig 2-3 where the server transmits the pluralities of partial images 211,212,221 and 222 to form a synthesized single partial image 2 in Fig 2. Furthermore if the client designates a particular region (**Img 211**) in the displayed image (**Img 2**) to request an enlarged image against the corresponding region, the server sequentially transmits to the client segmental images (**Img 311-322**) necessary for displaying **the designated** region out of the segmental images forming an image (Img 300). This shows that upon enlarging segment Img 211 the server sends the reduced in resolution image. This is shown in (**Fig 2 section 3 and section 1**).

9. Regarding claim 5, Niblack and Yang disclose the apparatus according to claim 4. Yang further disclose characterized in that said search result display means generates a new single partial image by synthesizing the plurality of partial images while a relative positional relationship between the plurality of partial images is kept as explained in claim 4.

10. Regarding Claim 6, Niblack and Yang disclose the apparatus according to claim 1. Yang further disclose characterized in that when the plurality of partial

images partly overlap, said search result display means generates a new single partial image by synthesizing the plurality of partial images in **(Fig 6A-6D where the image has pluralities of partial images)**.

**11.** Regarding Claim 7, Niblack and Yang disclose the apparatus according to claim 1. Yang further disclose characterized in that sizes of the plurality of partial images are unified to a predetermined size as in Claim 4 where each partial images are unified to a one predetermined size or resolution.

**12.** Regarding Claim 8, Niblack discloses an image search apparatus in **(FIG 1)** which searches for an image by using image storage means for storing a plurality of images **(Element 36)**, region information storage means for storing partial images included in the respective images stored in the image storage means in correspondence with the respective images **(Element 34)**, and region feature storage means for storing features of the partial images stored in the region information storage means in correspondence with the partial images **(Element 35)**, comprising: image feature designation means for designating a feature of a search target image **(Elements 15,16 and Col 3 Lines 58-65)**; candidate image determination means for searching features of partial images in the region feature storage means on the basis of the feature of the image which is designated by said image feature designation means **(Element 32 and Col 3 Lines 66 through Col 4 Lines 1-17)**, and determining an image which is made

to correspond to a partial image obtained on the basis of a search result as a candidate image from the images stored in the image storage means (**Col 4 Lines 11-17**). Niblack also discloses search result display means (**Element 13**) for displaying a reduced image of the candidate image determined by said candidate image determination means in a plurality of patterns at (**Col 11 Lines 5-10**). Niblack is silent and however does not disclose search result display means for displaying a reduced image of the candidate image determined by said candidate image determination means in a plurality of patterns that includes an enlarged partial image.

Yang in (**Fig 1-3,Page 1 Para 5,Page 4 Para 47,48,53,54 and Page 5 Para 65**) disclose wherein said search result display means displays a reduced image of the candidate image upon enlarging the partial image included in the candidate image. Yang discloses in Sections 1 and 2 of fig 2 where an I211 is enlarged to Img 2 (**as shown in the dotted line with circled 2**). Yang further discloses the pluralities of the patterns that include an enlarged partial image in (**Figs 6A-6D and Page 6 Para 0083**). Yang further discloses that the enlargement method and apparatus has an advantage of speed and low operational cost in Para 18 by enlarging the reduced size image at the server. Both Niblack and Yang are analogous art and are from the same field of endeavor, therefore it would have been obvious for one of ordinary skill in the art at the time the invention was made to have used the teachings of yang in the apparatus of Niblack for the above reasons.



**13.** Regarding Claim 9, Niblack and Yang discloses the apparatus according to claim 8. Niblack further disclose characterized in that said search result display means **(Element 13 Fig 1)** displays the plurality of reduced images in the form of a list **(Col 12 Lines 61-67 and Col 13 Lines 1-22)**. Niblack also discloses reduced images of the patterns in **(Fig 5)**. Yang also discloses the display with plurality of reduced images in **(Fig 2 sections 1 and 3, Para 47 and 48)**.

**14.** Regarding Claim 10, Niblack and Yang discloses the apparatus according to claim 8. Niblack further disclose characterized in that said search result display means **(Element 13 Fig 1)** displays a reduced image of the candidate image at **(Col 12 Lines 61-67 and Col 13 Lines 1-22)**. Yang also discloses the display with plurality of reduced images in **(Fig 2-3, Para 47 and 48)**.

**15.** Regarding Claim 11, Niblack and Yang discloses the apparatus according to claim 8. Niblack discloses characterized in that said search result display means **(Element 13 Fig 1)** displays a reduced image of the partial image. Yang also discloses the display with plurality of reduced images in **(Fig 2-3, Para 47 and 48)**.

**16.** Regarding Claim 12, Niblack and yang discloses an apparatus according to Claim 8. Yang further disclose characterized in that said search result display

means alternately displays the reduced images at the same position one by one in an automatic manner **(Fig 2-3 and Page 6 Para 83)**.

**17.** Regarding Claim 13, Niblack and Yang discloses the apparatus according to claim 8. Yang further disclose characterized in that the apparatus further comprises switching means for switching display of the reduced images in said search result display means, and said search result display means alternately displays the reduced images at the same position one by one on the basis of a switching instruction from said switching means in **(Fig 2-3 and Page 4 Para 55 where the process is repeated until the final image of optimum resolution is displayed)**. Yang further discloses at **(Page 6 Para 83)** where the display image are sequentially enlarged.

**18.** Regarding Claim 14, Niblack and Yang discloses the apparatus according to Claim 1. Yang further discloses characterized in that said search result display means displays the reduced image in an area with a predetermined size at **(Fig 2-3)**.

**19.** Regarding Claim 15, Niblack and Yang disclose the apparatus according to Claim 1. Yang further disclose characterized in that the partial image comprises a rectangular image having a region surrounded by a circumscribed rectangle of a predetermined object region included in the image in **(Fig 2 and Page 6 Para**

**0084).**

**20.** Regarding Claim 16, Niblack and Yang discloses the apparatus according to claim 1., characterized in that said search result display means displays a reduced image of the candidate image while emphasizing (**identifiable**) the partial image included in the candidate image in (**Fig 2-3**).

**21.** Claim 18 is a corresponding method performed by the apparatus as Claimed in Claim 1. See the explanation of apparatus performing a method in Claim 1.

**22.** Claim 20 is a corresponding method performed by the apparatus as Claimed in Claim 8. See the explanation of apparatus performing a method in Claim 8.

**23.** Claim 22 is a computer-readable recording medium storing a program defined in claim 1. See the explanation of Claim 1.

Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Niblack in view of Yang and in further view of Brown et al. (US 6356908) hereafter Brown.

**24.** Regarding Claim 17, Niblack and Yang discloses the apparatus according to claim 1. Niblack also disclose region feature storage means stores, as a feature

of the image, at least one of concept information expressing a concept obtained from the partial image in **(Fig 5)**. Niblack however does not disclose Language information expressing the concept in a language, an image feature expressing a feature of the partial image, and a combination of the concept information, the language information, and the image feature.

Brown discloses Language information expressing the concept in a language, an image feature expressing a feature of the partial image, and a combination of the concept information, the language information, and the image feature in **(Fig 5,6 and Figs 9 and 10)**. Brown discloses presenting a set of thumbnail images of the linked pages in the database near the links to the linked pages at **(Col 2 Lines 18-20)**. Brown further discloses that a textual name followed by a short textual description of the linked page does not provide sufficient information to enable one to make an intelligent decision as to open the link at **(Col 1 Lines 55-59)**. Niblack, Yang and Brown are from the same field of endeavor and are analogous art, therefore it would have been obvious for one of ordinary skill in the art at the time the invention was made to have used the teachings of brown in the Query system and method of Niblack and Yang for the above reasons.

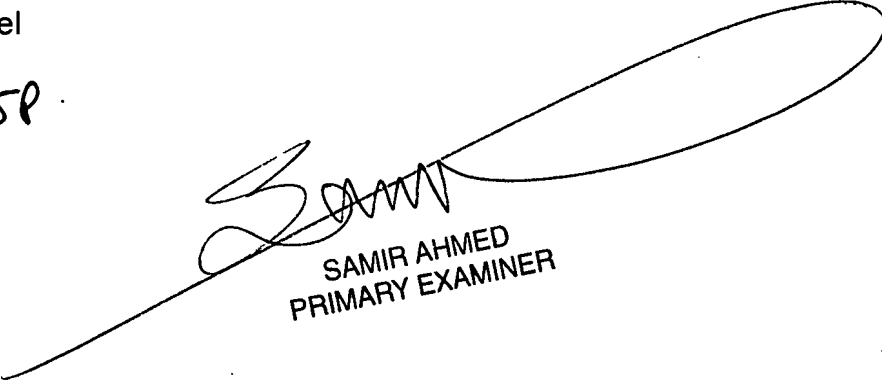
### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jayesh A. Patel whose telephone number is 571-

270-1227. The examiner can normally be reached on M-F 7.00am to 4.30 pm (5-4-9). If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jingge Wu can be reached on 571-272-7429. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Jayesh Patel  
09/19/07

JP



SAMIR AHMED  
PRIMARY EXAMINER